Taijie Chen

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EDUCATION

The University of Hong Kong — Hong Kong, CN
Ph.D. in Transportation Engineering — Apr 2023–Apr 2027 (expected)

The University of Hong Kong — Hong Kong, CN
M.S. in Computer Science — Sept 2021–Jul 2023

Nankai University — Tianjin, CN
B.E. in Software Engineering — Sept 2017–Jun 2021

PUBLICATIONS

Journal

[1] **Chen, T.**, Shen, Z., Feng, S., Yang, L., & Ke, J. (2025). Dynamic matching radius decision model for on-demand ride services: A deep multi-task learning approach. Transportation Research Part E: Logistics and Transportation Review, 193, 103822. (JCR–Q1, SSCI–Q1, SCIE–Q1, IF 8.3)

[2] Feng, S., **Chen, T.**, Zhang, Y., Ke, J., Zheng, Z., & Yang, H. (2024). A multi-functional simulation platform for on-demand ride service operations. Communications in Transportation Research, 4, 100141. (JCR–Q1, IF 12.5)

Conference

[1] Tan, W., Chen, D., Xue, J., Wang, Z., **Chen, T.**. Teaching-Inspired Integrated Prompting Framework: A Novel Approach for Enhancing Reasoning in Large Language Models. Proceedings of the 31st International Conference on Computational Linguistics: Industry Track, accepted. (CCF–B)

[2] **Chen, T.**, Liu, J., Feng, S., Ke, J. 2025. Enhancing Autonomous Mobility on Demand Systems: A Hierarchical Repositioning Approach Integrating Regional-level and Route-level Decision. Proceedings of the TRB Annual Meeting 2025, Washington, DC, USA, January 5–9, 2025.

[3] **Chen T.**, Liang J., Zhao Y., Ke J., 2024. To grab or not to grab? Revealing determinants of drivers' willingness to grab orders under the broadcasting mode. Proceedings of the 28th International Conference of Hong Kong Society for Transportation Studies, HKSTS 2024: Transport and Equity, Hong Kong, December 9–10, 2024.

[4] **Chen T.**, Liu J., Hu Z., Feng S., Ke J., 2024. A Top-to-Bottom Reposition Method for Ride-hailing Platforms. Proceedings of the 28th International Conference of Hong Kong Society for Transportation Studies, HKSTS 2024: Transport and Equity, Hong Kong, December 9–10, 2024.

[5] **Chen, T.**, Liu, J., Feng, S., Ke, J. 2024. A Top-to-Bottom Reposition Method for Ride-hailing Platforms, Presented in the Conference in Emerging Technologies in Transportation Systems (TRC-30), Crete, Greece, September 2-4, 2024.

[6] **Chen T.**, Shen Z., Feng S., Ke J., 2023. TEB: A time series model for on-demand e-hailing matching in the broadcasting mode. Proceedings of the 28th International Conference of Hong Kong Society for Transportation Studies, HKSTS 2023: Transport and Equity, Hong Kong, December 11–12, 2023.

Working Paper

[1] **Chen, T.**, Liang, J., Zhao, Y.*, & Ke, J. (2024). To grab or not to grab? Revealing determinants of drivers' willingness to grab orders under the broadcasting mode. Travel Behavior and Society, under review. (JCR–Q1, IF 5.1)

[2] **Chen, T.**, Liu, J., Feng, S.*, Qiu, J., & Ke, J. (2024). Enhancing Autonomous Mobility on Demand Systems: A Hierarchical Repositioning Approach Integrating Regional-level and Route-level Decision. IEEE Transactions on Intelligent Transportation Systems, under review. (SCI–Q1, JCR–Q1, IF 7.9)

PATENTS

[1] Ke, J., **Chen T.**, and Wang, J., An AI-based system for simulating a transportation network. U.S. Patent, Application No. 63/669,387, filed on 10 Jul 2024.

SOFTWARE COPYRIGHT

[1] Teaching resource network management system based on knowledge graph (Registration No.2021SR0651132).

[2] Teaching resource network making system based on knowledge graph (Registration No.2021SR0651080).

[3] Teaching resource network display system based on knowledge graph (Registration No.2021SR0651130).

WORK EXPERIENCE

Algorithm Engineer, 2012 Laboratory Riemann Laboratory, Huawei Co., Ltd Jan 2023–Mar 2024

- Conduct research on ETA and EV energy consumption prediction.

Algorithm Engineer , Didi Chuxing Co., Ltd Nov 2022–Jul 2023

- Electric Vehicle Anomaly Detection.

Research Assistant, The Hong Kong University of Science and Technology Aug 2022–Mar 2023

- Research and develop reinforcement learning methods for vehicle dispatching and vehicle repositioning.

PROJECTS

[1] Tianjin Innovation and Entrepreneurship Training Project, 201910055373, "Digital inheritance of intangible cultural heritage based on VR technology—taking Tianjin's "Clay Figure Zhang" culture as an example". Sep 2019–Sep 2024, RMB$ 10,000., PI.

[2] Smart Traffic Fund, PSRI/78/2311/RA, "SmartSim: AI-assisted Simulation Software for Multimodal Transportation Operations", 1 Sep 2024 –31 August 2026, Core Member.

[3] Smart Traffic Fund of Hong Kong SAR Government, PSRI/29/2201/PR, "Development of a Simulation Platform and Artificial Intelligent Algorithms for Optimising Operation and Management of Taxi E-hailing Services", 31 Mar 2023 – 30 Sep 2024, Core Member.

[4] CCF-DiDi GAIA 202410. "A Study on Spatiotemporal Supply-Demand Regulation in the Ride-Hailing Scenario". Sep 2024–Sep 2025, RMB$ 250,000, Core Member.

AWARDS & HONORS

Postgraduate Scholarship	2023–2027
Third Prize of China Internet + Tianjin Competition	2020
Social Welfare Scholarship, Nankai University	2020
Innovation and Entrepreneurship Scholarship, Nankai University	2020
Academic Excellence Scholarship, Nankai University	2019

SKILLS & LANGUAGE

Languages: Chinese Mandarin (native), English (fluent)

Programming: Python, Java, C++.